



Academic Management Manual

Section L

Outcomes Assessment Workbook

Academic
Affairs
2015-16

Table of Contents

Learning Outcomes

Learning Outcomes and Student Success – Dr. Ginger Pedersen	L-1
Overview of the Learning Outcomes Workbook.....	L-2

Learning Outcomes at Palm Beach State

What are Learning Outcomes?	L-2
The Three States of Curriculum.....	L-3
Why Use Learning Outcomes?	L-4
How Learning Outcomes Support Palm Beach State’s Mission	L-4
How Learning Outcomes Differ from Learning Objectives.....	L-4
Levels of Learning Outcomes	L-5
As a faculty member, what’s in it for me?	L-6
Timelines	L-7

Constructing Learning Outcomes

Writing Effective Learning Outcomes	L-8
Blooms’ Taxonomy	L-10
Suggested Verbs to Use in Bloom’s Taxonomy	L-12
Using Verbs to Construct Learning Outcomes	L-13
Program Level Learning Outcomes	L-14
Course Level Learning Outcomes	L-16

Assessing Learning Outcomes

Introduction	L-18
Assessment Flowchart.....	L-19
General Education Learning Outcomes Assessment Process	L-20
Program Learning Outcomes Assessment Process	L-20
Educational Support Services Outcomes Process	L-20
Community and Public Service Outcomes Process	L-21
Documenting Outcomes Assessment	L-21

Support for Learning Outcomes

Workshops	L-21
Website	L-21
Program Review	L-21

Summary and Conclusions.....

References and Website Resources

Appendix A

General Education Philosophy and Learning Outcomes	L-23
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Appendix B

Definition of Terms	L-24
---------------------------	------

Appendix C

Assessment Statement.....	L-25
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Learning Outcomes

MEMORANDUM

To: Faculty and Staff

From: Dr. Ginger L. Pedersen, Interim Vice President of Academic Affairs

Date: July 2015

As a state college, Palm Beach State College values its central role as a teaching and learning institution, and our mission statement emphasizes the importance of the learning environment. Palm Beach State's curriculum is structured around *learning outcomes*. Learning outcomes can be thought of as the knowledge, skills, and abilities students attain as a result of their involvement in an educational activity.

The learning outcomes approach reflects the philosophy of making learning more meaningful and effective for both students and faculty. Making education more meaningful for students requires that they gain a view of education that education can enable them to enrich their lives by learning. This is in contrast to the viewpoint that education is a task primarily done to satisfy the demands of others, such as faculty or the institution.

By developing educational experiences based on what students should be able to do with their knowledge, learning outcomes help faculty, staff and students understand the point of the educational activity, be it a program or course.

This workbook is designed to present learning outcomes and how we implemented them throughout the college's curriculum. This truly was a collaborative effort in which faculty played a central role in transforming Palm Beach State's curriculum to be learning outcome-based.

If you have any suggestions or ideas on our process, or insights on how you have implemented learning outcomes within your classroom, please contact the Office of Institutional Research and Effectiveness.

Overview of the Learning Outcomes Workbook

This workbook will serve as your introduction to the concept of *learning outcomes*. It was designed to provide a broad introduction to learning outcomes and serve as a base for further study into the subject. The workbook includes:

- A definition of learning outcomes
- Palm Beach State’s implementation of learning outcomes
- Guidance on how to write learning outcomes
- Support for developing learning outcomes
- Assessment guidelines and procedures for general education and programs

Learning Outcomes at Palm Beach State

What are Learning Outcomes?

What exactly is a “learning outcome”? Learning outcomes are statements that indicate what the student is expected to be able to do upon completion of an activity, course, program, or degree. Although relatively recent to colleges accredited under the Southern Association of Colleges and Schools (SACS), the learning outcomes approach has been an integral part of accreditation standards in western states such as California, and in nations such as the United Kingdom. The movement toward learning outcomes changes the way we think about curriculum and teaching. Education has either focused on teaching small, discrete skills which can be “mastered” or teaching abstract concepts without connecting or integrating them with how students actually use or apply those concepts in daily life.

Learning outcomes are statements that indicate what is expected that the student will be able to do upon completion of an activity, course, program, or degree.

This focuses what we do towards two very simple questions:

- What did the student learn? (Learning Outcome)
- How do we know it? (Assessment)

To be considered a learning outcome, the outcome must be able to be achieved by the learner and they must be observable and measurable. If the learning outcomes states:

- who is to do the action
- what action is to be done, and
- what result will come from that action

it is a good student learning outcome statement.

The Three States of Curriculum – How Learning Outcomes bring what we teach and what students learn together

It is said that any college actually has three curriculums:

- The **declared** curriculum – what we have in the catalog
- The **taught** curriculum - what is actually presented to students
- The **learned** curriculum – what students actually learn

Visually, it would look like this:

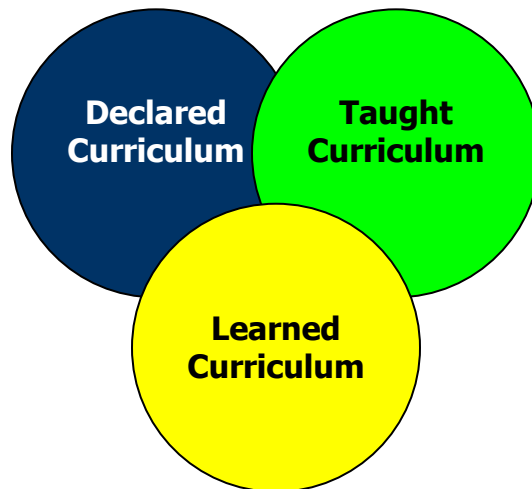


Figure 1 – Three Types of Curriculum

In an ideal curriculum situation, the three circles would have a much greater overlap, so that the declared, taught, and learned curriculum are essentially the same. Learning outcomes help us realize that ideal curriculum state through assurance that students actually learn the curriculum we declare, through faculty teaching.

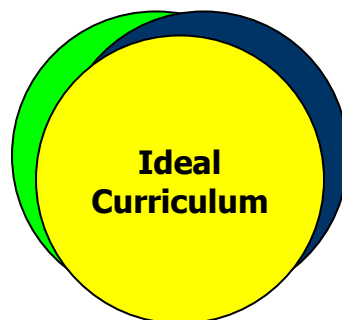


Figure 2 – The Ideal Curriculum

Why use Learning Outcomes?

As an institution dedicated to student learning, focusing our curriculum towards learning outcomes rather than objectives allows us to demonstrate that learning has occurred by our students in a measurable way. Focusing on learning and student success also helps support the College mission through the strategic plan.

Focusing on learning and student success also helps support the College mission through the strategic plan.

SACSCOC, our accrediting agency, emphasizes the importance of learning outcomes. Learning outcomes assessment is an integral part of the principles of accreditation

(<http://www.sacscoc.org/pdf/2012PrinciplesOfAccreditation.pdf>).

Therefore, learning outcomes were a major part of Palm Beach State's receipt of reaffirmation of accreditation in 2012.

How Learning Outcomes support Palm Beach State's Mission

Palm Beach State College, founded in 1933 as Florida's first public community college, is a diverse, comprehensive institution dedicated to serving the educational needs of Palm Beach County. Integrally linked to the community through strong partnerships, the College provides associate and baccalaureate degrees, professional certificates, workforce development and lifelong learning. Palm Beach State College's mission is to create and sustain a dynamic teaching and learning environment that provides a high-quality, accessible, affordable education, preparing students to contribute and compete ethically and successfully in a diverse global community.

To help fulfill this mission, learning outcomes were developed for all programs and courses at Palm Beach State. Prior to this, the term "learning objective" was used. During the spring 2006 academic term, General Education learning outcomes were developed from the existing competencies. In the 2006-07 academic year, each credit and PSAV program developed learning outcomes from the program objectives. In the 2007-08 academic year, learning outcomes were developed for each credit and PSAV course. Revised assessment models were developed to reflect this evolution.

How Learning Outcomes differ from Learning Objectives

Although at first glance the terms *learning objectives* and *learning outcomes* may seem interchangeable, they are different. Some consider the difference between the terms *learning objective* and *learning outcome* as what we hope our students will learn (objective) and what our students actually learn (outcome). Others consider objectives to be similar to short-term goal statements. In this definition, objectives signify steps that must be accomplished in order to achieve a goal.

Learning objectives and learning outcomes are different.

In general, a *learning objective* focuses more on a discrete learning event within a course. Contrastingly, the term *learning outcome* focuses more on learning that occurs after a student has completed the activity, and through a process of reflection assimilates the knowledge at a higher level. These are subtle, but important, differences.

The chart below indicates some of the significant differences between learning objectives and learning outcomes.

Objectives	Student Learning Outcomes
Represent valuable skills, tools, or content (nuts and bolts) that enable a student to engage a particular subject.	Represent overarching products of the course.
Focus on content and skills important within the classroom or program; what the staff and faculty will do. Often termed the input in the course.	Express higher level thinking skills that integrate the content and activities and can be observed as a behavior, skill, or discrete useable knowledge upon completing the class.
Can often be numerous, specific, and detailed. Assessing and reporting on each objective for each student may be impossible.	An end product that can be displayed, observed, and evaluated against criteria.
*Excerpt from: Section 3, "Objectives and SLOs" in <i>Assessing Student Learning in Community Colleges</i> , Janet Fulks.	

Levels of Learning Outcomes

As you come to understand the concept of a learning outcome, it becomes evident that learning outcomes can be developed at many different levels of the curriculum. In Palm Beach State’s model for developing learning outcomes, we have identified three levels:

- General Education Learning Outcomes
- Program Learning Outcomes
- Course Learning Outcomes

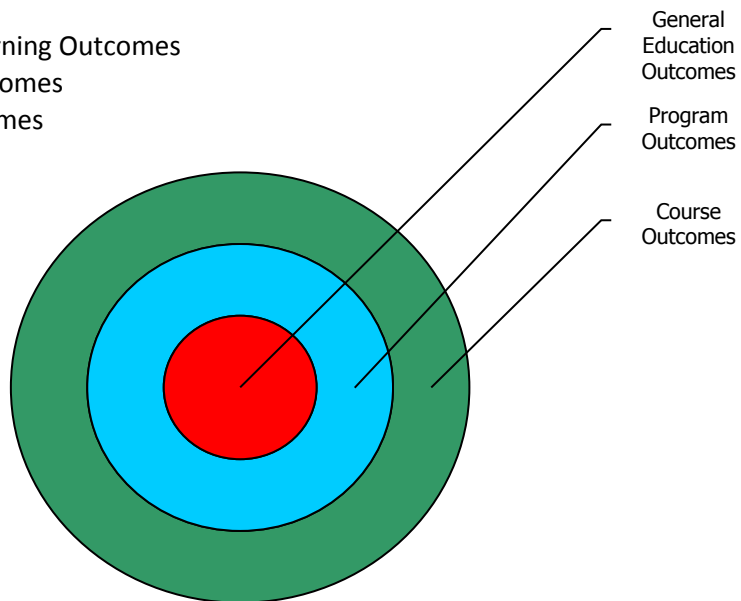


Figure 3 – Levels of Learning Outcomes

General Education Learning Outcomes

General education at Palm Beach State represents the core of the Associate of Arts degree and is an integral part of each Associate of Science/Applied Science degree. During the spring 2006 term, a committee was convened to review the college’s current general education philosophy, objectives and competencies. Through the committee’s work and input of faculty clusters, Palm Beach State revised its general education philosophy and developed general education learning outcomes. The philosophy and learning outcomes continue to be reviewed on a regular basis and are revised as needed. These learning outcomes are for completion of the general education package as a totality. Additionally, four institutional learning outcomes are used to measure the Associate of Arts degree. The institutional learning outcomes are also incorporated in varying degrees into the assessment plans of all career-oriented and workforce programs.

The most recent version of the general education and institutional learning outcomes can be found in Appendix A and are also available online at <http://www.palmbeachstate.edu/general-education-learning-outcomes.aspx> .

Program Learning Outcomes

One of the opportunities that a learning outcomes approach brings to Palm Beach State is to develop learning outcomes at the program level – what do we expect students to be able to do as the result of completing a particular program? Developing learning outcomes from the existing objectives in the state curriculum frameworks at the program level (AS, ATD, CCC, ATC, and PSAV) was a major focus in the 2006-07 academic year. Program learning outcomes are available at <http://www.palmbeachstate.edu/program-learning-outcomes.aspx>.

Course Learning Outcomes

In the refocus on learning outcomes, course objectives were transformed into learning outcomes, allowing assessment and improvement to happen in measurable and meaningful ways. All course outlines have been transferred from the Word and PDF files to a database where all the course learning outcomes are also stored. The data base and course learning outcomes are available at <http://www.palmbeachstate.edu/course-outlines.aspx> .

As a faculty member, what’s in it for me?

Learning outcomes provide an opportunity for faculty to evaluate course and program offerings in terms of student learning. Faculty can make a difference in the learning experiences of Palm Beach State’s students by collaborating with each other to define clear expectations for learning that can then be communicated to students. The implementation of learning outcomes has been a transformative experience of how we examine students and learning.

Faculty will be key players in developing learning outcomes.

Our focus is completely on what students learn and how we can improve student learning through assessment. There are benefits for both faculty and students.

In focusing on student learning outcomes, faculty

- Recommend learning outcomes for the programs and courses.
- Know exactly what students are expected to learn in each course.
- Provide focus for developing appropriate learning experiences for students so that they have the knowledge, skills, and abilities to be successful in their personal and professional lives.
- Empower students to become more involved with their learning experiences.
- Assess students’ learning and use results as a tool for improvement.
- Grow professionally as they step away from traditional teaching formats and try innovative pedagogies to get students more involved in the learning process.

In focusing on student learning outcomes, students

- Know exactly what is expected of them.
- Become more involved in their learning experiences.
- Apply knowledge, skills, and abilities from one class to the next or to the workplace.

The key is that a partnership in learning develops – students know what they will be able to do as the result of the learning and faculty will have the tools to ensure that students are learning the stated outcomes.

Another important part of understanding learning outcomes is to have a common language when we speak of learning outcomes. To help facilitate this common understanding, Appendix B contains our working definitions for terms used throughout this workbook in relation to learning outcomes.

Timelines

The transition to a learning outcomes approach was phased in over a three-year period. Each of these steps represented a major project where faculty input and collaboration were invaluable to ensure success.

Activity	Timeline
General Education Learning Outcomes (evolved from General Education Objectives and Competencies)	Completed in 2005-06*
Program Learning Outcomes (evolved from Program objectives in state curriculum frameworks)	Completed in 2006-07*
Course Learning Outcomes (evolved from course learning objectives)	Completed in 2007-08*
Assessment of Program Learning Outcomes	Continuous
Assessment of General Education Outcomes	Continuous

*Dates indicate initial completion. Due to curriculum development the process is continuous.

As always, the curriculum committee will be the recommending body to administration on the program revisions and revised course outlines as they are developed through this process.

Constructing Learning Outcomes

Writing Effective Learning Outcomes

As mentioned earlier, learning outcomes were developed at three different levels: General education, program and course. Although all learning outcomes share certain characteristics, learning outcomes at the general education and program level tend to be more global and broad in nature. Those developed at the course level are more specific in nature in relation to the course subject. The three levels must be considered when choosing from the numerous approaches available to develop learning outcomes.

From a very broad perspective, a learning outcome should be:

- learner-centered
- specific
- measurable/observable

To further distill these concepts, many institutions have adopted the A-B-C-D formula. This formula uses four elements to construct a learning outcome:

A	Audience
B	Behavior
C	Condition
D	Degree

Here is an outcome written using this formula: ***“The student will apply appropriate techniques for addressing a policy decision problem, when given one, 90% of the time.”***

the student	Audience
will apply appropriate techniques for addressing a policy decision problem	Behavior
when given one,	Condition
90% of the time.	Degree

Note that the order of the A-B-C may vary, for example: ***“Given a policy decision problem, the student will apply appropriate techniques for addressing it 90% of the time.”***

Given a policy decision problem,	Condition
the student	Audience
will apply appropriate techniques for addressing it	Behavior
90% of the time.	Degree

Note also that the degree to which the outcome achieved does not always have to be stated in the outcome. Here are other examples of learning outcomes:

1. *“For a given decision, students can predict industry-wide costs (effects on other parts of the industry).”*
2. *“Given information about successful business ventures, students will identify the organizational factors that contributed to their success.”*
3. *“Given pricing information about spot and forward markets, students will be able to identify buying opportunities to maximize profits.”*

Exercise

Use the A-B-C-D method to identify each part of the outcome in the three outcomes listed above.

Notice that the learning outcome examples are all easily measurable; as you read them, you can easily envision test questions, projects or problems that would reveal whether, and the degree to which, the learning outcomes have been met.

Some institutions and faculty have adopted the A-B-C-D method as a way of ensuring that learning outcomes are written well. Others rely heavily on Bloom’s taxonomy.

Using Bloom’s Taxonomy

Another approach often cited as helpful for developing learning outcomes is the use of Bloom’s taxonomy (1956). This taxonomy enables faculty to rely on precise language for expressing the learning outcomes of programs and courses. Each of the six categories of Bloom’s taxonomy allows the faculty member to assess a different type of skill/behavior in the course, starting from the lowest level of learning, the knowledge level, to the highest level, that of evaluation.

By specifying outcomes that display different levels of learning, Bloom’s taxonomy offers more depth and detail than behavioral objectives. Learning outcomes expressed at various levels of Bloom’s taxonomy become the foundation for the selection and design of assignments (including examinations), teaching strategies, readings, and instructional materials such as technology.

Bloom’s Taxonomy

Category	Definition	Related Behaviors
Knowledge	recalling or remembering something without necessarily understanding, using, or changing it	define, describe, identify, label, list, match, memorize, point to, recall, select, state
Comprehension	understanding something that has been communicated without necessarily relating it to anything else	alter, account for, annotate, calculate, change, convert, group, explain, generalize, give examples, infer, interpret, paraphrase, predict, review, summarize, translate
Application	using a general concept to solve problems in a particular situation; using learned material in new and concrete situations	apply, adopt, collect, construct, demonstrate, discover, illustrate, interview, make use of, manipulate, relate, show, solve, use
Analysis	breaking something down into its parts; may focus on identification of parts or analysis of relationships between parts, or recognition of organizational principles	analyze, compare, contrast, diagram, differentiate, dissect, distinguish, identify, illustrate, infer, outline, point out, select, separate, sort, subdivide
Synthesis	relating something new by putting parts of different ideas together to make a whole.	blend, build, change, combine, compile, compose, conceive, create, design, formulate, generate, hypothesize, plan, predict, produce, reorder, revise, tell, write

Category	Definition	Related Behaviors
Evaluation	judging the value of material or methods as they might be applied in a particular situation; judging with the use of definite criteria	accept, appraise, assess, arbitrate, award, choose, conclude, criticize, defend, evaluate, grade, judge, prioritize, recommend, referee, reject, select, support

Bloom's taxonomy is often presented visually as a pyramid. In this representation, the most basic methods of cognition occur at the lowest levels, and we might also relate this to educational levels.

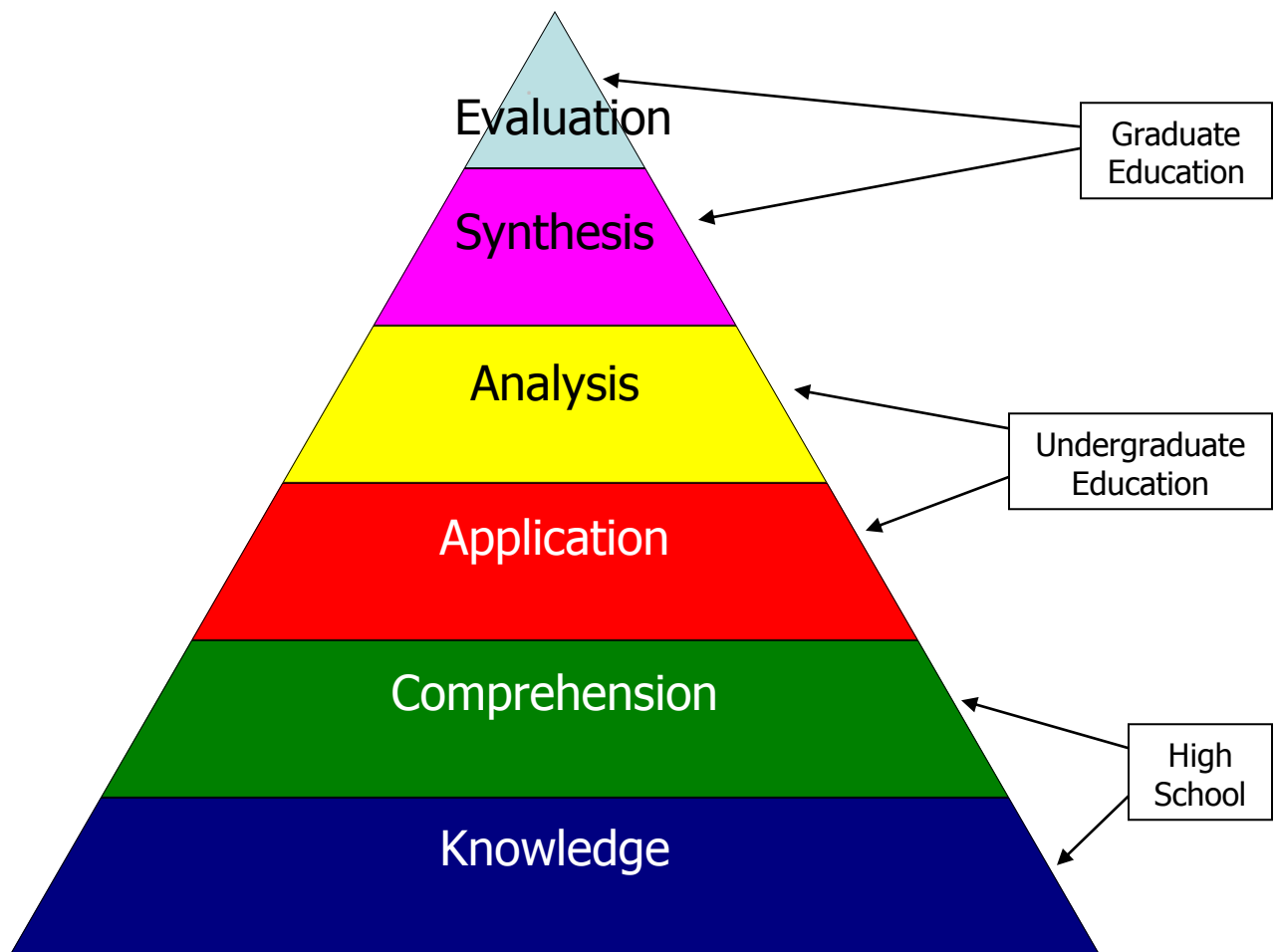


Figure 4 – Bloom's Taxonomy

Suggested Verbs to Use in Each Level of Bloom’s Taxonomy

Knowledge	Comprehension	Application	Analysis	Synthesis	Evaluation
Define	Choose	Apply	Analyze	Arrange	Appraise
Identify	Cite examples of	Demonstrate	Appraise	Assemble	Assess
List	Demonstrate use of	Dramatize	Calculate	Collect	Choose
Name	Describe	Employ	Categorize	Compose	Compare
Recall	Determine	Generalize	Compare	Construct	Critique
Recognize	Differentiate between	Illustrate	Conclude	Create	Estimate
Record	Discriminate	Interpret	Contrast	Design	Evaluate
Relate	Discuss	Operate	Correlate	Develop	Judge
Repeat	Explain	Practice	Criticize	Formulate	Measure
Underline	Express	Relate	Deduce	Manage	Rate
	Give in own words	Schedule	Debate	Modify	Revise
	Identify	Shop	Detect	Organize	Score
	Interpret	Use	Determine	Plan	Select
	Locate	Utilize	Develop	Prepare	Validate
	Pick	Initiate	Diagram	Produce	Value
	Report		Differentiate	Propose	Test
	Restate		Distinguish	Predict	
	Review		Draw conclusions	Reconstruct	
	Recognize		Estimate	Set-up	
	Select		Evaluate	Synthesize	
	Tell		Examine	Systematize	
	Translate		Experiment	Devise	
	Respond		Identify		
	Practice		Infer		
	Simulates		Inspect		
			Inventory		
			Predict		
			Question		
			Relate		
			Solve		
			Test		
			Diagnose		

Using Verbs to Construct Learning Outcomes

Learning outcomes should be expressed through the use of active verbs that state what students will be able to do as the result of the learning. In order to be clear, verbs and expressions such as 'to know', 'to understand', 'to appreciate', 'to be acquainted with', 'to learn' should be avoided, since they are often too vague to convey the exact nature of the learning outcome being sought.

More active and explicit verbs such as 'state', 'show', 'explain', 'define', 'describe', 'predict', 'recognize' and 'criticize' should be used where possible.

A number of lists of suitable vocabulary for expressing learning outcomes have been developed in other higher education institutions. The lists which follow have been compiled from numerous sources from the Internet. These are a guide only - they have to be applied to subject knowledge, understanding and skills.

Cognitive Skills

- **Activities which give evidence of knowing** - Define, describe, identify, label, list, name, outline, reproduce, recall, select, state, present, extract, organize, recount, write, measure, relate, match, record.
- **Activities giving evidence of comprehension** - Interpret, translate, estimate, justify, clarify, defend, distinguish, explain, generalize, exemplify, infer, predict, rewrite, summaries, discuss, perform, report, present, indicate, find, represent, formulate, contrast, classify, express, compare, recognize, account.
- **Activities giving evidence of application of knowledge/understanding** - Apply, solve, demonstrate, change, compute, manipulate, use, employ, modify, operate, predict, produce, relate, show, select, choose, assess, operate, illustrate, verify.
- **Activities giving evidence of analysis** - Recognize, distinguish between, evaluate, analyze, break down, differentiate, identify, illustrate how, infer, outline, point out, relate, select, separate, divide, compare, contrast, justify, resolve, examine, conclude, criticize, question, diagnose, categories, elucidate.
- **Activities giving evidence of synthesis** - Arrange, assemble, organize, plan, prepare, design, formulate, construct, propose, present, explain, modify, reconstruct, relate, re-organize, revise, write, summaries, account for, report, alter, argue, order, select, manage, generalize, derive, synthesize, enlarge, suggest.
- **Activities giving evidence of creativity** - Originate, image, begin, design, invent, initiate, state, create, pattern, elaborate, develop, devise, generate, engender
- **Activities giving evidence of evaluation** - Judge, evaluate, assess, discriminate, appraise, conclude, compare, contrast, criticize, justify, defend, rate, determine, choose, value, question, measure.

Transferable Skills

- **Psycho-motor skills** - Perform, execute, operate, manipulate
- **Self Appraisal and Reflection on Practice** - Reflect, identify, recognize, evaluate, criticize, judge
- **Planning and Management of Learning** - Plan, prioritize, access, use, select, explore, identify, decide
- **Problem-solving** - Identify, choose, select, recognize, implement, define, apply, assess, resolve, propose, formulate, plan

Communication/Presentation Skills

- Communicate, express, articulate, question, examine, argue, debate, explain, formalize, respond, rebut, justify, defend, listen, illustrate, demonstrate, organize, pace, model, summaries

Interactive and Group skills

- Accommodate, interact, collaborate, participate, cooperate, coordinate, structure, arbitrate, initiate, lead, direct, guide, support, decide, set goals, motivate, reflect, evaluate, recognize, enable

Program-Level Learning Outcomes

Program learning outcomes are developed to answer questions such as “What do you want your program graduates to be able to do?” Program level learning outcomes are a holistic picture of what is expected of students completing a defined program or course of study. The emphasis is on the result of the learning experience, rather than the process, or what is covered in lectures or textbooks. Program learning outcomes indicate that the students have developed knowledge, skills and values as a result of being a student in a given program at Palm Beach State.

Each program at Palm Beach State developed a set of learning outcomes that captured broad aspects of each program and produced a *program map* that indicated the relevant General Education Learning Outcome associated with each program learning outcome. The key was to develop broad statements of the desired learning outcome rather than the specific skills which are captured at the course level. (This process has been revised to allow programs to align multiple general education learning outcomes and institutional learning outcomes to each program learning outcome.)

Once the program learning outcomes were developed, the program faculty prepared “program maps” that demonstrate that all the program learning outcomes are covered among the core curriculum courses, and at what level. The map also indicates any general education and institutional learning outcomes that are supported by each program learning outcome, if any

(there is no requirement that every program learning outcome need be linked to a general education or institutional learning outcome). Following is an example of a program map.

Program Map

Course	Program Learning Outcome #1	Program Learning Outcome #2	Program Learning Outcome #3	Program Learning Outcome #4	Program Learning Outcome #5
CJB1203	I		I		I
CJB1301	R	I		I	
CJB1400	EC		R	R	
CJB2100		EC		EC	
CJB2300	R	R			R
Gen Ed	Communication		Info. Literacy	Crit. Think	Ethics

I=Introduced R=Reinforced EC=Extended Coverage

This program map serves as a guide to know that all the program learning outcomes are covered within the curriculum and at various levels of depth. The exact number of program learning outcomes varies by program. The detail of specific skills attainment is saved for learning outcomes at the course level. A blank program map template can be downloaded from: http://www.palmbeachstate.edu/academicservices/documents/plo_form.doc.

The following resources can be helpful in developing program level learning outcomes:

- State Curriculum Frameworks: <http://www.fldoe.org/workforce/dwdframe/>
- Palm Beach State Course Outlines: <http://www.palmbeachstate.edu/course-outlines.aspx>
- Program Accreditation Standards (if applicable to your program)
- State Course Numbering System Website: <http://scns.fldoe.org/>

Sample program learning outcomes

Paralegal program (Palm Beach State College)

1. Identify substantive and procedural theories and concepts as they apply to a wide variety of legal tasks completed in legal settings, such as private law firms, corporate and public legal offices and nonprofit legal services entities.
2. Effectively communicate in writing and orally with persons who seek legal services as well as other parties who are an integral part of the legal process, such as court personnel, other paralegals in offices of opposing counsels, clients and witnesses.
3. Use both print and technology modes, including pleading texts and programs, and research programs typically found in legal settings.
4. Identify and solve questions related to the ethical practice of law under the direction of a licensed attorney.
5. Recognize and understand how court personnel, attorneys and all other persons employed in the delivery of legal services relate to each other.

Law Enforcement Officer (Palm Beach State College)

1. Demonstrate a level of physical conditioning that is required for the performance of a law enforcement officer.
2. Demonstrate proper discipline and personal accountability expected in the law enforcement profession.
3. Demonstrate proficiency in all high liability skills: Firearms, Defensive Tactics, Vehicle Operations, First Aid and Dart Firing Stun Gun.
4. Demonstrate an understanding of the fundamental skills of Law Enforcement required of a certified Law Enforcement Officer to include: Introduction to Law Enforcement, Legal, Communications, Human Issues, Patrol 1, Patrol 2, Crime Scene Investigations, Criminal Investigations, Traffic Stops, DUI Traffic Stops, and Traffic Crash Investigations.

Course-Level Learning Outcomes

Our existing course outlines were revised so that the objectives were replaced with learning outcomes using the guidelines of this document. As part of this development process, all existing course outlines were converted to a database system. Please see the web page at <http://www.palmbeachstate.edu/course-outlines.aspx> for course learning outcomes.

Course learning outcomes (CLOs) describe what the student is expected to be able to do upon completing the course. CLOs are more specific than program learning outcomes and may also be more numerous.

CLOs must be measurable. Program learning outcomes (PLO) assessments may be based on CLOs assessments, so it is important to keep assessment in mind when writing course learning outcomes.

CLOs begin with the implicit parenthetical, “(The student will . . .).” The actual CLO begins with an active verb that describes what the student will be able to do.

Submitting Course Learning Outcomes

CLOs are submitted via the curriculum committee process. After approval of a new or revised course, Academic Services maintains the course learning outcomes in the online database.

Sample course learning outcomes

LIT 2110 - World Literature before the Renaissance

The student will be able to:

1. Identify the masterpieces of world literature through the Renaissance.
2. Identify the most significant ideas contributed to the world by international authors.
3. Recognize the literature in the historical background and intellectual climate of the period in which it was written.
4. Recognize major characteristics of world literature, including genre, tone, and purpose.
5. Write critical MLA-style essays relative to the literature read during the course interpreting, critiquing and critically thinking during close reading of the text assigned.
6. Analyze the rhetorical characteristics, purposes, and motivations for non-fiction prose, political speeches, fiction, poetry, and autobiography.

PSY 2012 - General Psychology

The student will be able to:

1. Identify, define, and interpret the historical and cultural underpinnings of the discipline of psychology.
2. Compare and contrast the different theoretical principles that formed the field of psychology.
3. Identify sound and flawed methodology in samples of psychological research.
4. Use psychological knowledge to analyze and evaluate psychological issues.
5. Conduct library and online research to present a thesis argument with regard to human nature and human behavior.
6. Demonstrate the ability to think critically about the nature vs. nurture controversy.
7. Demonstrate an understanding of the modern interrelationship between the different psychological theories.
8. Demonstrate the ability to write a comprehensive research paper that pertains to an important psychological topic.
9. Analyze and be able to defend and debate the different concepts that apply to the field of psychology.
10. Compare and contrast the original writings of the major theorists in the field psychology.

Assessing Learning Outcomes

Learning outcomes assessment is a tool to help us know and articulate how well students are attaining the learning outcomes of our programs and courses. Assessment efforts prior to the evolution to the current model were more focused on indirect measures and assessments of achievement, such as GPA and transfer rates. The current model is focused on both direct (e.g., course embedded assessments) and secondary data sources.

There are many approaches to assessing learning outcomes. In the design of Palm Beach State's approach to assessment, we incorporated several key concepts:

- The assessment process should not put an undue burden on faculty and students;
- The assessment process should be based on authentic assessment and multiple measures that use rubrics and other tools to assess learning outcomes;
- The assessment process should produce measureable objectives;
- The assessment process should result in continuous improvement in student learning.

During the spring 2009 semester, the General Education Committee comprised of faculty and administrators developed an assessment statement, found in Appendix C. This statement expands on the above four concepts and clearly expresses what assessment means at Palm Beach State.

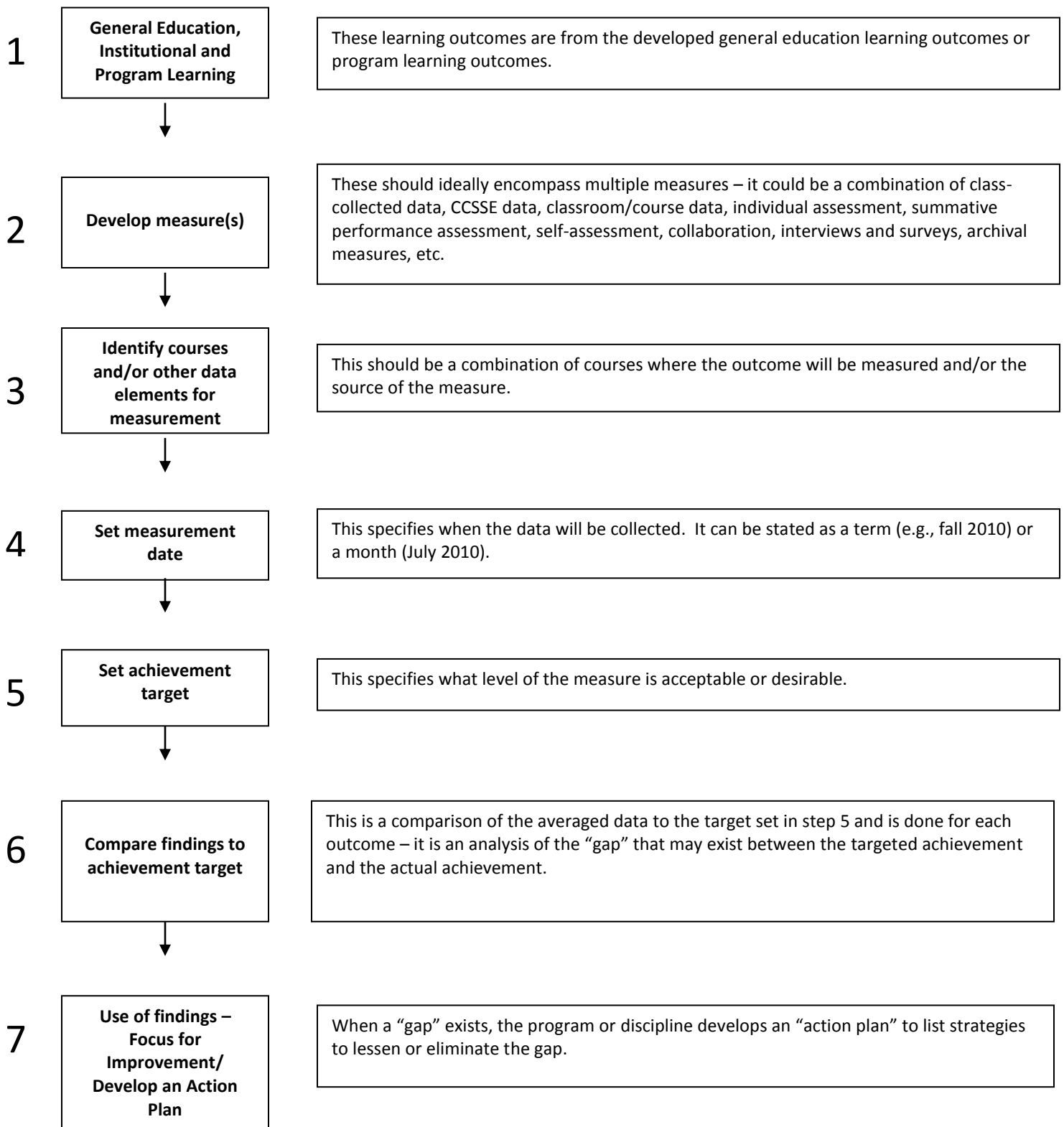
From research, we developed a model that incorporates seven "steps" along the assessment pathway. Each step identifies a component of the assessment process:

1. the learning outcome to be examined;
2. how the outcome is measured;
3. where the measures will be taken;
4. when the measures will be taken;
5. the achievement target for the learning outcome measure;
6. how the data are to be analyzed (results compared to target); and
7. how the results are used to improve student learning.

General education learning outcomes, institutional learning outcomes, and program learning outcomes are assessed through this process. The assessment of course learning outcomes is what you do as a faculty member when you assess student performance in your class.

The diagram and flow charts on the following page provides an explanation of what is happening at each stage of the assessment process.

LEARNING OUTCOMES ASSESSMENT FLOW CHART



General Education Learning Outcomes Assessment Process

The assessment of general education learning outcomes at Palm Beach State College is an ongoing, evolutionary process. The principal component of the assessment process consists of assessments that are embedded in the general education curriculum. Faculty developed common assessment instruments for at least one course learning outcome for every course contained within the general education program. These assessments are all direct measures of student learning and typically take the form of common exam items or rubrics for papers, projects, performances, etc. Currently, every faculty member who teaches a general education course is required to administer the appropriate common assessment in every section taught and report their assessment results to the Office of Institutional Research and Effectiveness. The results are then aggregated and distributed to the General Education Committee, faculty clusters and administration for review. Based on the aggregated assessment results, improvement strategies are designed at the course level by the faculty clusters and at the institution level by the General Education Committee and the College administration. The common assessment instruments, benchmarks and improvement strategies are reviewed on an annual basis by the faculty clusters and the General Education Committee.

In addition to the direct measures of student learning described above, the general education learning outcomes are also assessed by indirect measures such as student self-reported data on the Graduating Student Survey and the Community College Survey of Student Engagement.

Program Area Learning Outcomes Assessment Process

The College currently has approximately 80 programs in the career area and every program has developed its own set of program learning outcomes. Each program is required to assess all of its learning outcomes on an annual basis. In addition to the learning outcomes that are specific to each program, there are three additional measures that are common to all workforce programs.

- Percent of program completers placed in-field – This is measured by data supplied by the State of Florida (Florida Education & Training Placement Information Program or FETPIP) which provides, for each program, the percentage of prior -year graduates who are employed in the field relevant to their training. The most recent FETPIP report is available at <http://www.palmbeachstate.edu/learningoutcomes/assessment-resources.aspx>.
- Licensure – For those programs that have state or board licensure or certification exams, the measure is the student passage rate on that exam. Programs report the percent of prior-year graduates who passed the requisite exam (if the outcome applies).
- Perkins Performance Measures – The three applicable measures relate to technical skill attainment, completion, and student retention and transfer.

Educational Support Services Outcomes Process

Outcomes assessment has also been implemented in Educational Support Services. These services include 10 areas of student services (Career Counseling, Financial Aid, Disabilities Services, Testing, Trio and Outreach, Registration, Student Life, Advising/Orientation, Recruitment and Dual Enrollment, and Athletics) as well as the library, Honors College and Student Learning Centers. Each of these areas is asked to assess all of their outcomes each year. Outcomes for Educational Support Services are a blend of learning and operational outcomes.

Community and Public Service Outcomes Process

The College assesses community/public service activities in six broad areas: Art galleries, theaters, library cultural events, continuing education, and cultural/commemorative events sponsored by the district. Assessments for this process are conducted twice a year. Reporting is done for the fall semester and again for the spring/summer terms combined. Each reporting unit enters their data into a template which is a summary of their assessment activity for that reporting period.

Documenting Outcomes Assessment

The College utilizes an assessment management tool called Compliance Assist to document the assessment activity undertaken at the College (with the exception of Community and Public Service outcomes that are documented in templates). Faculty or administrators in every program at the College have been designated to enter their program assessment data directly into Compliance Assist. General Education and the Associate of Arts degree assessment results are collected and entered by the Office of Institutional Research and Effectiveness (IRE). Persons assigned to Compliance Assist may access the program from the IRE Assessment Resources web page at <http://www.palmbeachstate.edu/assessment-resources.aspx>.

Support for Learning Outcomes

Workshops

Workshops on developing and assessing student learning objectives are held on each campus to train administrators, department heads, program managers, faculty, and staff.

Website

A companion website for the understanding and development and assessment of learning outcomes is available at <http://www.palmbeachstate.edu/assessment-resources.aspx>. This website is frequently updated to provide the most up-to-date information on learning outcomes at Palm Beach State.

Program Review

For program review, learning outcomes are central to the assessment process in support of institutional effectiveness. For a detailed explanation of the program review process, please see the document at <http://www.palmbeachstate.edu/sectionk.pdf>.

Summary and Conclusions

We hope you have found this guide helpful in our journey in developing learning outcomes and helping to transform our curriculum to being learner centered and focused. If you have any suggestions on how this guide can be improved or how we can better implement learning outcomes, please contact either the Academic Services Office or the Office of Institutional Research and Effectiveness.

References and Website Resources

Assessing Student Learning in Higher Education -

<http://www2.bakersfieldcollege.edu/courseassessment/>

Course Learning Outcomes from Florida Community College (various course pages)-

<http://www.fscj.edu>

El Camino Community College - <http://www.elcamino.edu/academics/slo/>

Foothill College: <http://www.foothill.edu/staff/irs/LOA/ArchiveLOA.html>

Popham, James. (2014). *Classroom Assessment: What Teachers Need to Know*. Boston, MA: Pearson.

Taxonomy of Educational Objectives: The Classification of Educational Goals; pp. 201-207; B. S. Bloom (Ed.) Susan Fauer Company, Inc. 1956.

Appendix A

General Education Philosophy and Learning Outcomes

Philosophy Statement

The General Education program at Palm Beach State College prepares students for lifelong intellectual pursuit and responsible participation in a complex global society through a core curriculum that incorporates values, shapes attitudes and offers students a depth and breadth of learning that transcends the content of any one specific discipline.

General Education Learning Outcomes

Communications: Demonstrate effective communication skills for a variety of audiences.

Humanities: Demonstrate an awareness of and an ability to effectively analyze creative works.

Mathematics: Demonstrate an understanding of mathematical concepts to solve real-world problems

Natural Sciences: Demonstrate comprehension of fundamental concepts, principles or processes about the natural world.

Social Sciences: Understand and apply sociological, cultural, political, psychological, historical and economic principles to a global environment.

Institutional Learning Outcomes

Critical Thinking: Engage in purposeful reasoning to reach sound conclusions.

Ethics: Demonstrate the ability to make informed decisions based on ethical principles and reasoning.

Global Awareness: Exhibit a sense of social, cultural and global responsibility.

Information Literacy: Demonstrate the ability to find, evaluate, organize and use information.

Appendix B

Definition of Terms

Assessment - Assessment is an ongoing process aimed at understanding and improving student learning. It involves making our expectations explicit and public; setting appropriate criteria and high standards for learning quality; systematically gathering, analyzing, and interpreting evidence to determine how well performance matches those expectations and standards; and using the resulting information to document, explain, and improve performance. When it is embedded effectively within larger institutional systems, assessment can help us focus our collective attention, examine our assumptions, and create a shared academic culture dedicated to assuring and improving the quality of higher education (*Angelo, AAHE Bulletin, November 1995, p. 7*).

Bloom's Taxonomy - Benjamin Bloom (1957) created a taxonomy for categorizing level of abstraction of questions that commonly occur in educational settings. The taxonomy provides a useful structure in which to categorize learning outcomes, since faculty will characteristically ask questions within particular levels.

Course Learning Outcome – Learning outcome that defines more specific skills and competencies a student should be able to do upon completion of the course.

General Education Learning Outcomes – Learning outcomes that are developed at global level that defines what students should be able to do upon completion of the general education program.

Institutional Learning Outcomes – Learning outcomes that define specific competencies a student should be proficient in after completing the Associate of Arts degree. These competencies are also taught to varying degrees in all of the career-oriented and workforce programs.

Learning Outcome - Learning outcomes are statements that indicate what is expected that the student will be able to do upon completion of an activity, course, program, or degree.

Objective – A statement of what we hope students will learn as the result of taking a course. Sometimes used interchangeably with the term outcome, but the outcome usually focuses on what the student actually learned and how they incorporate that learning into other learning activities.

Program Learning Outcome – Learning outcomes that define in broad terms what a student should be able to do as the result of completing a program of study.

Program Map – Table that lists the program learning outcomes and assesses which courses in the core curriculum introduce, reinforce, or provide extended coverage of the outcomes.

Appendix C

Palm Beach State's Assessment Statement

Assessment at Palm Beach State College is a purposeful and collaborative process that contributes to the continuous improvement of student learning. We demonstrate this through clear statements of student learning outcomes, measurement of those outcomes, and the use of the resulting information to document, explain and improve performance. This on-going process builds a dynamic academic culture encouraging best practices, inspiring creativity and fostering college-wide conversation about student learning.

Assessment is...

- A process - it is ongoing, faculty-driven, and promotes student learning.
- Creative - it can take on a wide variety of forms and is only limited by the instructor's imagination.
- Wisdom - it emerges from the collective insight and experience of the faculty.
- Connection – it informs academic development planning for shared dialogue, peer presentation, workshops and other professional development and training opportunities.
- Accountability - it provides evidence of learning for purposes of accountability.
- Purposeful - Assessment provides students with opportunities to identify their strengths and weakness throughout the learning process.
- Anonymous – faculty and students are never identified.
- A college-wide indicator - assessment results are aggregated, because assessment results represent the institution, not individual students or faculty.

Assessment is NOT...

- An end in itself - assessment that does not help us to promote student learning is a waste of time.
- Punitive - the purpose of assessment is to evaluate student learning, not to reward or punish faculty or staff.
- One dimensional - we will not use any single mode of assessment to answer all questions. We are committed to using multiple measures to examine student learning.
- Intrusive - we will not use assessment in a way that will impinge upon the academic freedom or professional rights of faculty. Individual faculty members must continue to exercise their best professional judgment in matters of grading and discipline.
- Burdensome - we do not need to directly assess all students in order to learn about the effectiveness of our programs and policies.
- Narrow - we will not use assessment only to evaluate the end of the student's experience or merely to be accountable to outside parties. Assessment must be an ongoing observation of what we believe is important.
- Grades – we will not assume that assessment is only grading.
- Disruptive - the assessment process should not hinder the student's progress in completion of a degree.
- Static - assessment is an evolving process that must be reviewed periodically to improve validity and efficiency.